

Revised Climate, Energy and Environmental Aid Guidelines (Draft CEEAG)

INITIAL SITUATION/BACKGROUND

The implementation of the European Green Deal and attainment of the climate targets can only be achieved with extensive investment in climate-neutral technologies, which is associated with substantial additional costs in ongoing operations. In order to promote such technologies and enable the ramp-up of the hydrogen economy, adjustments to the EU state aid framework are necessary. Against this background, the German National Hydrogen Council (NWR) expressly welcomes the European Commission's efforts to further develop the Green Deal with a view to achieving its goals.

The European Commission's draft of the revised Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG) published on 7 June is, in the view of the NWR, a positive further development in important areas. This concerns, in particular, the possibility to make up the financing gap and instruments to hedge investment risks (Carbon Contracts for Difference). The new chapter 4.1 Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy, as well as chapter 4.11 Aid in the form of reductions from electricity levies for energy-intensive users are fundamentally a good basis for sustainably promoting hydrogen-based transformation projects, even if important gaps still need to be closed in some places. Similarly, clarifications and adjustments are important to avoid legal uncertainty to the detriment of companies and Member States.

The German National Hydrogen Council notes with concern that the draft has not brought together the various elements of aid with respect to the ramp-up of the hydrogen economy in a separate hydrogen chapter. In view of the close interconnection and the many interactions of state aid issues in the field of hydrogen production, hydrogen infrastructure and hydrogen applications, coherent treatment in a separate chapter would be urgently recommended (as was done in Chapter 4.10 Aid for district heating or cooling due to similar, but far less complex, interrelationships in the field of grid-based heating and cooling). In this way, the numerous complexities and special features in the areas of generation and application technologies as well as in the area of the eligibility of infrastructure projects could be taken into account in a targeted manner. In addition, there is a risk of further time-consuming and resource-intensive individual notifications, which could be avoided with a separate funding chapter for hydrogen. The current draft lacks sufficiently clear details of how renewable electricity for hydrogen electrolysis can be exempted from surcharges, fees, taxes and levies.

The German National Hydrogen Council is also concerned that the draft CEEAG restricts the scope for ceilings on taxes and surcharges to electricity consumption for energy-intensive primary industries in order to avoid carbon leakage and does not adequately address the implementation of effective carbon leakage protection strategies with the elements of free allocation of emission allowances, relief from taxes, levies and surcharges on electricity and fuels, border adjustment measures as well as support for investments in terms of climate neutrality transformative technologies.

RECOMMENDATIONS OF THE GERMAN NATIONAL HYDROGEN COUNCIL

To enable a funding framework that is tailor-made for the ramp-up of the hydrogen economy, the German National Hydrogen Council recommends in particular the following adjustments in the draft CEEAG:

1. Enable hydrogen production at competitive prices

The German National Hydrogen Council welcomes the restriction of aid in the area of hydrogen production to green hydrogen, but also points out that, in view of the hydrogen infrastructure and large-volume hydrogen applications, such a restriction is challenging and controversial in terms of a rapid transition strategy. At the same time, however, aid in these areas for other transition options must be provided with clear guidance that ensures consistency of these transition options with the EU goal of climate neutrality (see Section 4). Of central importance for the market ramp-up of green hydrogen production are clear arrangements on how the electricity from renewable energies used in electrolysis plants can be fully or, if necessary, partially exempted from surcharges, fees, taxes and levies. At the same time, massive acceleration of the expansion of electricity generation from renewable energy sources is a key prerequisite for the ramp-up of the hydrogen economy in the European Union. Regulations that inhibit this expansion, such as reduction of tender volumes when auctioning, should therefore be dropped, as the signals to the market associated with such auctioning can be of considerable importance and should not be eliminated.

2. Effective funding framework for the H₂ infrastructure

An interconnected, Europe-wide hydrogen network from the customer to hydrogen sources at home and abroad is indispensable for a European hydrogen economy. It can be created cost-effectively by converting existing natural gas pipelines and with some new builds. A suitable regulatory framework with joint infrastructure cost regulation of natural gas and hydrogen is necessary for the development of the hydrogen network. Until this framework is created, however, subsidies play a decisive role in a market ramp-up of regional hydrogen infrastructures that can be implemented in the short term.

3. Enable investments in climate-friendly application technologies

In order to achieve the ambitious targets for CO₂ reduction, the ramp-up of hydrogen-based application technologies must be made possible very quickly and to a considerable extent. It should therefore be made explicitly clear that not only innovative but also available technologies are eligible for aid if they are associated with a transformative reduction in green-house gases and contribute to the 2030 climate target or 2050 climate neutrality.

In order to take account of the foreseeable shortage of green hydrogen, the use of natural gas should also be explicitly included in the promotion of climate-friendly technologies, provided that it is used in plants that are designed to be H₂-ready or in which hydrogen is only used partially during the initial stages. It should be made clearer that projects involving investments in natural gas-based industrial production facilities are to be considered eligible for aid if they serve as a bridging technology and it is demonstrated that a carbon lock-in is avoided, for example through binding commitments for the possibly gradual use of climate-neutral hydrogen, the timelines of which are consistent with the pathways en route to climate neutrality in the European Union.

The German National Hydrogen Council expressly welcomes the fact that, for the hydrogen economy in particular, operating cost subsidies (e.g., in the context of Carbon Contracts for Difference) are to be permitted in addition to investment subsidies. It would point out, however, that it is precisely these operating cost subsidies that form an essential element for the overall economic viability of investments in the field of hydrogen applications and therefore cannot be limited to cases in which operating cost subsidies are also intended to have a significant influence on plant operation.

Funding procedures by means of tendering are a common and tried and tested instrument, but they also require a minimum diversity among actors and projects to ensure a sufficient intensity of competition. However, especially in areas where massive investments are needed by 2030, such as hydrogen-based processes in industrial applications, these conditions are not met in many cases. Therefore, exemptions from the tendering procedure should be broader than is the case in the current draft.

4. Streamlining the burdens of disclosure and proof

The European Commission's greater flexibility in examining aid must not be accompanied by higher burdens of disclosure and proof. On the contrary – excessive bureaucracy must be reduced and procedures streamlined. Verification should therefore focus more on thresholds, groupable evidence and generalisations. Furthermore, the included requirement of having to prove the necessity of measures besides the ETS through counterfactual measures over the entire project duration is counterproductive. Also, the omission of justifications for specific measures would be correct if sector- or technology-specific EU targets exist anyway against the background of the Fit for 55 package.

5. Further develop relief for energy-intensive companies

The transformation of energy-intensive companies towards climate-neutral and hydrogen-based production takes place in stages, so that in a transitional period CO₂-intensive and already low-CO₂ processes will coexist simultaneously. Thus, in addition to the high additional costs for the new processes, companies must also compensate for energy cost-related burdens in the existing processes. In order to ensure the international competitiveness of energy-intensive companies in this transition phase, an appropriate policy mix for the prevention of carbon leakage is therefore necessary, which must consist of different elements. In this context, on the one hand, it is essential to maintain the existing relief measures, such as the limitation of surcharges to finance renewable energies or compensation for electricity cost increases due to emissions trading and price increases as a result of the coal phase-out. In addition, the electrification of processes within the framework of the transformation is also dependent on internationally competitive electricity procurement costs. For this reason, it is not apparent why the scope for relief contained in the previous State aid guidelines (deductible in the case of surcharge limitations and additional capping with reference to gross value added) should be significantly nar-

rowed. Here, the German National Hydrogen Council is in favour of maintaining the currently existing threshold values. On the other hand, the rapid expansion of plants for low-cost electricity generation from renewable energies is necessary. In order to maintain the international competitiveness of companies in the energy-intensive industries, the financial effect of today's regulations should be maintained in the payment of grid charges and capacity mechanisms and, in addition, incentives should also be created to make consumption more flexible.

The list of eligible sectors should be broader than currently envisaged. This is particularly true with regard to the new segment of climate-neutral hydrogen production, which very largely eludes the application of delimitation criteria to historical data. Otherwise, the lack of a surcharge reduction option for hydrogen electrolysis and thus a considerable increase in the price of hydrogen would have a counter-productive effect on the ramp-up of the hydrogen economy.

DISSENTING OPINION

of German National Hydrogen Council members Dr Christiane Averbeck (Klimaallianz Deutschland) and Verena Graichen (Bund für Umwelt und Naturschutz Deutschland, BUND)

The German National Hydrogen Council's express objective is to assist and advise the State Secretaries' Committee on Hydrogen in the further development and implementation of Germany's National Hydrogen Strategy. The use or promotion of conventional fossil fuels is not part of the hydrogen strategy. By calling for natural gas to be classified as a climate-friendly technology and promoted accordingly, the German National Hydrogen Council is departing from the political framework of the National Hydrogen Strategy and supporting the production, transport and use of fossil fuels. The technical reduction of the greenhouse gases produced in the process, e.g., through hydrogen production and CO₂ storage, is not declared in the statement as a mandatory condition. We have already criticised the use of blue hydrogen and its recommended promotion elsewhere, as this does not meet the requirements of achieving climate neutrality as quickly as possible. This problem situation is seriously compounded by the KUEBLL statement: The expansion or stabilisation of natural gas use is completely incompatible with the common goal of defining a pathway to climate neutrality that is compatible with the goals of the Paris Agreement and thus also with the German Climate Protection Act. Stronger, rather than weaker, economic incentives are urgently needed to encourage industry to switch from fossil to renewable energy. The blanket criterion of H₂-readiness of plants and pipelines is not suitable for ensuring a sustainable climate impact and thus justifying the extraction, transport and use of natural gas. If at all, this should be the basis for enabling investments in industrial plants and energy infrastructures that can lead to the full use of climate-neutral hydrogen according to a precise timetable and in line with climate targets. No new support schemes should be created for the mere use of fossil energies.

A study on the use of hydrogen in the heating sector is currently being conducted on behalf of the German National Hydrogen Council, on the basis of which consultations are to take place that are as objective as possible. With the KUEBLL statement, however, positions have already been defined in advance that will also decisively determine the use of hydrogen in the heating sector. From our point of view, a needs assessment must take place before converting natural gas pipelines to hydrogen. Unscrutinised conversion of the natural gas grid would neglect sensible decentralised alternatives for renewable energy production – with negative consequences for energy efficiency and energy prices. The conversion, extension or decommissioning of gas pipelines must be based on independent expert opinions.

These can then be used as justification for public funding of infrastructure projects. Joint cost regulation and the cross-financing of hydrogen pipelines by natural gas customers are, however, highly controversial. This entails price risks for households that are difficult to gauge over the long term and potentially creates an automatic financial mechanism for switching the existing natural gas grid fully over to hydrogen without sufficient analysis on a systematic or case-by-case level.



THE GERMAN NATIONAL HYDROGEN COUNCIL

On 10 June 2020, the German Federal Government adopted the National Hydrogen Strategy and appointed the German National Hydrogen Council. The Council consists of 26 high-ranking experts in the fields of economy, science and civil society. These experts are not part of public administration. The members of the National Hydrogen Council are experts in the fields of production, research and innovation, industrial decarbonisation, transportation and buildings/heating, infrastructure, international partnerships as well as climate and sustainability. The National Hydrogen Council is chaired by former Parliamentary State Secretary Katherina Reiche.

The task of the National Hydrogen Council is to advise and support the State Secretary's Committee for Hydrogen with proposals and recommendations for action in the implementation and further development of Germany's National Hydrogen Strategy.

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